

**SM5817
SGL41-20**

THRU

**SM5819
SGL41-100**

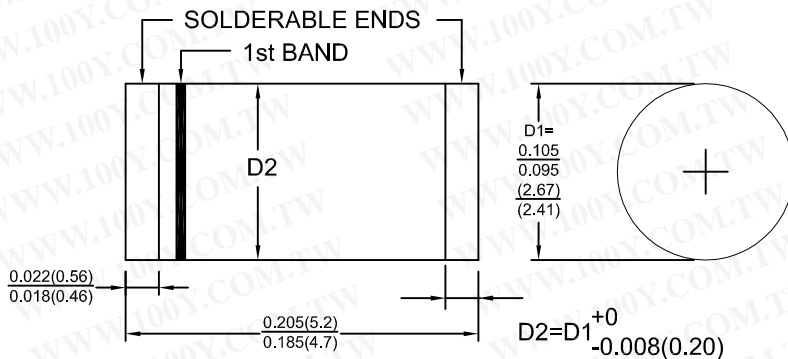
SURFACE MOUNT SCHOTTKY RECTIFIERS

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

FEATURES:

- Low power loss, high efficiency
- High surge current capability
- Low forward voltage drop
- For use in low voltage, high frequency inverters, free wheeling application
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Guard ring for overvoltage protection

MELF/DO-213AB



1st band denotes type positive and (cathode)

Dimensions in inches and (millimeters)

MECHANICAL DATA

Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy

Terminals : Plated terminals, solderable per MIL-STD-202 Method 208

Polarity : Silver color band on body denotes cathode

Mounting Position : Any

Weight : 0.116 gram, 0.0046 ounce

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	SM5817	SM5818	SM5819	SGL41-	SGL41-	SGL41-	Units
		SGL41-20	SGL41-30	SGL41-40	50	60	100	
Maximum recurrent peak reverse voltage	VRRM	20	30	40	50	60	100	Volts
Maximum RMS voltage	VRMS	14	21	28	35	42	70	Volts
Maximum DC blocking voltage	VDC	20	30	40	50	60	100	Volts
Maximum average forward rectified current	I(AV)	1.0						Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	IFSM	30.0						Amps
Maximum instantaneous forward voltage drop at 1.0 A (NOTE 1)	VF	0.5	0.55	0.60	0.7	0.8	8.5	Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1)	IR	1.0						mA
		Ta=25 °C			Ta=125 °C			
Typical junction capacitance (NOTE 2)	CJ	10			5.0			
		110			80.0			pF
Typical thermal resistance	Rth-JA	75.0						°C/W
	Rth-JL	30.0						
Operating junction temperature range	Tj	-55 to +150						°C
Storage temperature range	Tstg	-55 to +150						°C

NOTE :1.Pulse test : 300 us pulse width, 1% duty cycle

2.Measured at 1 MHZ and applied reverse voltage of 4.0 voltage

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

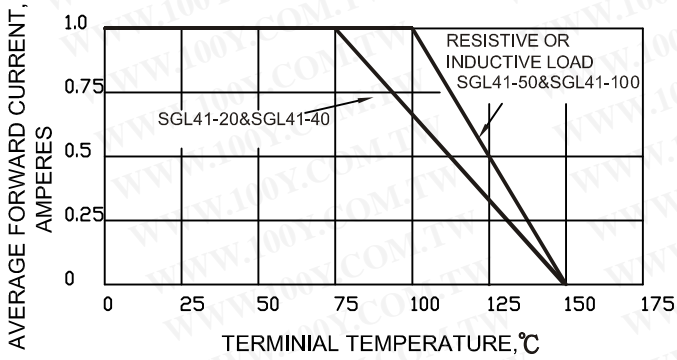


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

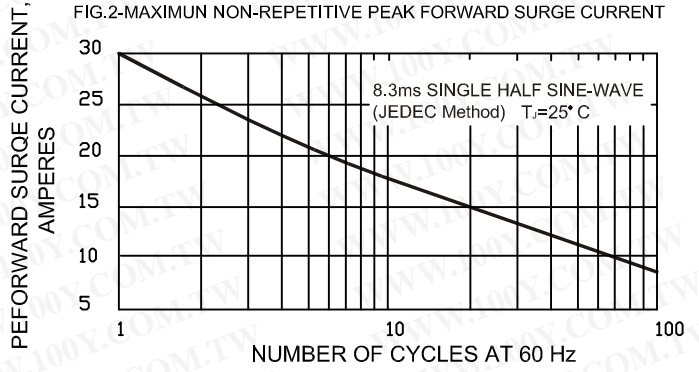


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

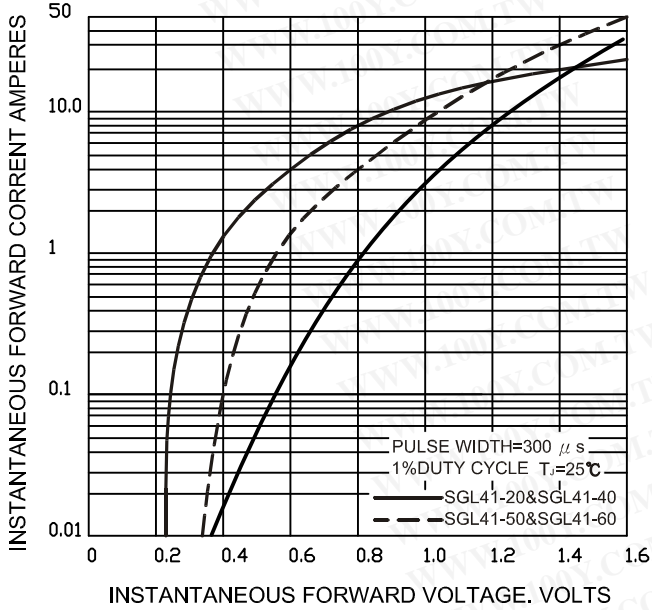


FIG.4-TYPICAL REVERSE CHARACTERISTICS

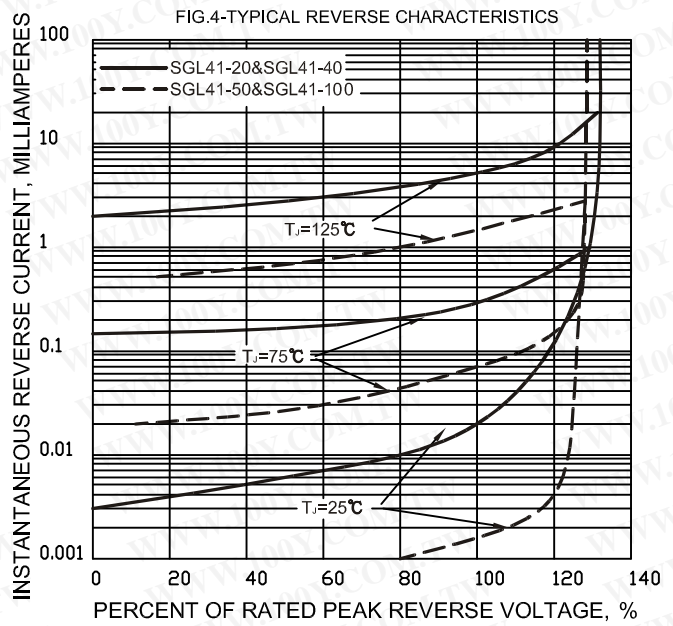
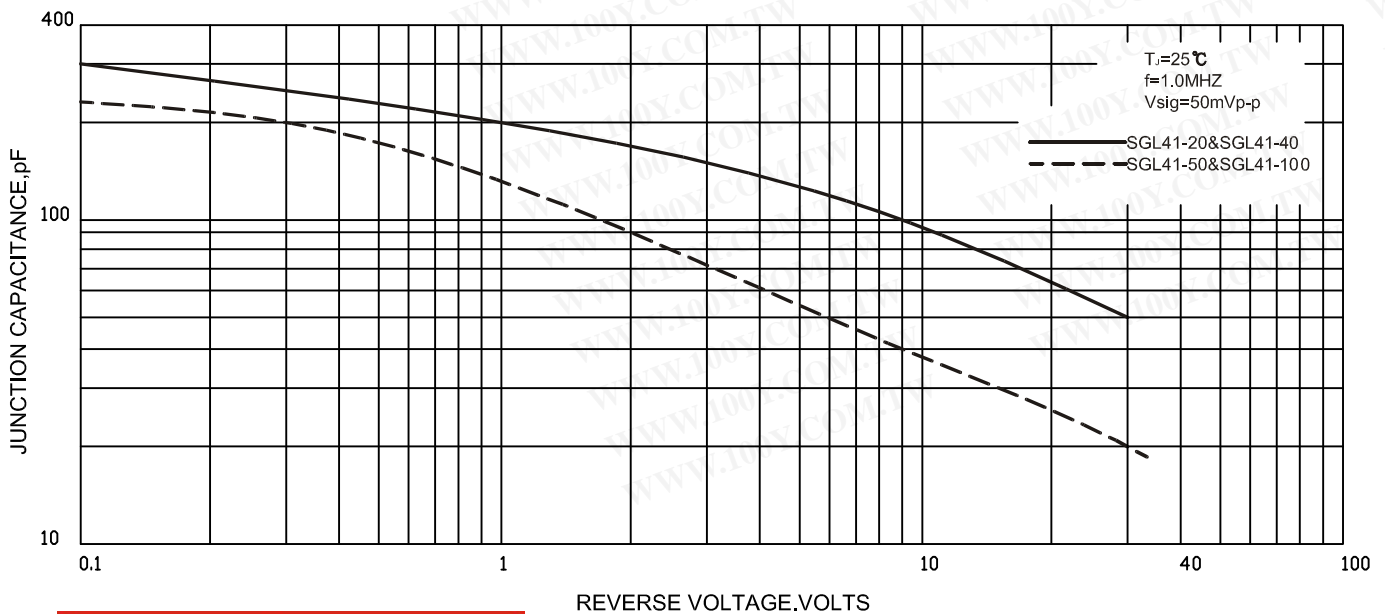


FIG.5-TYPICAL JUNCTION CAPACITANCE



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